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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,670	12/05/2003	Edward R. Cochran JR.	BC101.0	3154
31672	7590	12/28/2004		
WILSON ENTERPRISES 2333 BRIGHTON FARMS BLVD. KNOXVILLE, TN 37932				
			EXAMINER BELLAMY, TAMIKO D	
			ART UNIT 2856	PAPER NUMBER

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/729,670	COCHRAN ET AL.	
	Examiner	Art Unit	
	Tamiko D. Bellamy	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,9-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) 4-7,14,15,17 and 18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment dated 11/1/04 has been received and entered. Claims 3, 6, 13, and 16 have been canceled. Claims 1, 2, 9-12, 19, and 20 are currently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, 9, 10, 12, 13, 16, 19, and 20 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diaz (6,762,679) in view of Conn (4,688,028).

Re to claims 1, 9-11, 19, and 20, as depicted in figs. 1 and 2B, Diaz discloses a tank fluid parameter sensor(s) comprising linear Hall sensors (e.g., probe 11a containing linear Hall sensor(s) 27, and 28, (see col. 2, lines 46-47, col. 3, lines 42-44)) in magnetic communication with a magnet (13b). As depicted in figs. 1 and 2B, Diaz discloses that the Hall sensor(s) (27, 28) are aligned essentially in the travel plane of the magnet (13b). Diaz discloses that transmitter (11c) sends a transmission signal to a remote receiver. Diaz also discloses that the transmission may be a wireless or some other network medium. This network medium inherently includes a two-way transceiving, paging or cellular network. While Diaz discloses a plurality of linear Hall sensors (27, 28) instead of only one linear Hall effect sensor, Diaz specifically states (see col. 2, lines 46-47) that one

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or more Hall sensors are mounted on a probe (11b). Therefore, Diaz's use of one linear Hall effect sensor is clearly inferred and/or suggested. As depicted in fig. 7, Conn discloses one Hall sensor (57) aligned in the traveling plane of a rotational bar magnet (35). Therefore, to modify Diaz by employing one liner Hall effect sensor would have been obvious to one of ordinary skill in the art at the time of the invention since Conn teaches a fuel-indicating device having theses design characteristics. The skilled artisan would be motivated to combine the teachings of Diaz and Conn since Diaz states that his invention is applicable to a level meter including a rotational magnet that moves in response to the changing level of liquid and a Hall sensor that responds to the magnet; and Conn is directed to Hall-effect sensor mounted in relation to a magnet that is rotated in response to the level of fuel.

Response to Remarks

4. Applicant's arguments with respect to claims 1, 2, 9-11, 12, 19, and 20 have been considered but are moot in view of the new ground(s) of rejection. It is the examiners position that claims 1, 2, 9-11, 12, 19, and 20 are not patentable over the newly applied art of Diaz (6,762,679) in view of Conn (4,688,028).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The examiner can normally be reached on Monday - Friday 6:30 AM to 3:30 PM.

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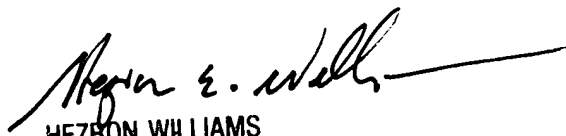
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamiko Bellamy

T.B.

December 17, 2004


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800